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09/935,249	08/22/2001	John M. Baron	10010911	9746
22879 7590 01/14/2009 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER BODDIE, WILLIAM				
ART UNIT		PAPER NUMBER		
2629				
NOTIFICATION DATE		DELIVERY MODE		
01/14/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

09/935,249

**Applicant(s)**

BARON ET AL.

**Examiner**

WILLIAM L. BODDIE

**Art Unit**

2629

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-884)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 11/8/08

### **DETAILED ACTION**

1. In an amendment dated December 21<sup>st</sup>, 2008, the Applicants amended claims 1, 9, 13 and cancelled claims 5 and 10. Currently claims 1-4, 6-9 and 11-20 are currently pending.
2. Applicant's are advised that the current case has been redocketed to a new examiner.

### ***Claim Objections***

3. Claims 4 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feinstein (US 6,466,198) in view of Thomas (US 6,567,101) and further in view of House et al. (US 5,878,283).

**With respect to claim 1**, Feinstein discloses an electronic device (fig. 2), comprising:

at least one acceleration sensor (82-84, 432 in fig. 14) capable of detecting an acceleration motion of said device along at least one axis and generating an acceleration signal in response (col. 13, lines 13-40);

a display that includes moving a graphical image that is capable of being moved in said display (fig. 1a-c)

a processor (100 in fig. 8) communicating with said at least one acceleration sensor and said display (12 in fig. 8);

wherein said processor receives said acceleration signal and moves said graphical image in response to said acceleration signal (for example; figs. 3a-b; fig. 1a-c); and

a memory communicating with said processor and storing a predetermined threshold (Feinstein; col. 7, line 63 – col. 8, line 14) and said graphical image is moved in response to said acceleration signal only if said acceleration signal exceeds said predetermined threshold (col. 9, lines 4-7, 17-22; figs. 7a-e).

Feinstein does not expressly disclose an image capturing device, a user-adjustable predetermined threshold, nor moving a graphical selection indicator in response to the acceleration signal.

Thomas discloses a graphical selection indicator (cursor, 506 in fig. 5a-e) that moves in response to an acceleration signal (col. 3, lines 37-42, col. 6, line 66 - col. 7, line 59) and is capable of being moved in said display to select from among a plurality of displayed icons (col. 3, lines 42-44, col. 1, lines 14-18).

Thomas and Feinstein are analogous art because they are both from the same field of endeavor namely accelerometer based user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to control a cursor as taught by Thomas in the device of Feinstein, for the benefit of additional interaction between the user and the device via the accelerometers.

Neither Thomas nor Feinstein expressly disclose that the device is an image capturing device nor a user-adjustable predetermined threshold for the acceleration sensor.

House discloses, an image capturing device (fig. 1; for example), comprising an acceleration sensor (col. 9, lines 44-47) and camera features and utilities are activated in response to an acceleration signal (abstract; col. 9, lines 59-62) only if the acceleration signal exceeds a user-adjustable predetermined threshold (col. 9, lines 51-59).

Thomas, Feinstein and House are analogous art because they are all from the same field of endeavor namely accelerometer based user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the devices of Feinstein and Thomas in an image capturing device with a user-adjustable predetermined threshold as taught by House.

The motivation for doing so would have been to avoid false alarms and activations (House; col. 9, lines 51-54).

**With respect to claim 2**, Feinstein, Thomas and House disclose, the device of claim 1 (see above).

Feinstein further discloses, wherein said device further comprises three acceleration sensors, with each sensor being positioned along a unique axis of three substantially orthogonal axes (X, Y and Z axis sensors 82-84, 432 in fig. 14).

**With respect to claim 3**, Feinstein, Thomas and House disclose, the device of claim 1 (see above).

Feinstein further discloses, wherein said at least one acceleration sensor comprises a three-axis acceleration sensor (col. 13, lines 58-59).

**With respect to claim 4**, Feinstein, Thomas and House disclose, the device of claim 1 (see above).

Feinstein, when combined with Thomas and House, further discloses, a memory communicating with said processor (Feinstein; col. 7, line 63 – col. 8, line 14) and storing a predetermined threshold and said graphical selection indicator is moved in response to said acceleration signal (Thomas; col. 3, lines 37-42, col. 6, line 66 - col. 7, line 59) only if said acceleration signal exceeds said predetermined threshold (Feinstein; col. 9, lines 4-7, 17-22; figs. 7a-e).

**With respect to claim 6**, Feinstein, Thomas and House disclose, the device of claim 1 (see above).

Feinstein, when combined with Thomas and House, further discloses, a memory communicating with said processor and storing a slew rate variable, wherein a movement speed of said graphical selection indicator is controlled by said slew rate (Feinstein; col. 7, lines 56-63; col. 9, lines 31-33; col. 8, lines 15-51; col. 9, lines 15-18, for example).

**With respect to claim 7**, Feinstein, Thomas and House disclose, the device of claim 1 (see above).

Feinstein further discloses, a memory communicating with said processor and storing an enable variable, wherein said processor moves said graphical selection indicator in response to said acceleration signal only if said enable variable is set to an enable state (col. 6, lines 40-58).

**With respect to claim 8**, Feinstein, Thomas and House disclose, the device of claim 1 (see above).

Feinstein further discloses, a select switch (62, 64 in fig. 4), wherein said processor moves said graphical selection indicator in response to said acceleration signal only if said select switch is set to an enable state (col. 6, lines 40-58).

**With respect to claim 9**, Feinstein discloses an electronic device (fig. 2), comprising:

an acceleration sensor (82-84, 432 in fig. 14) means for detecting an acceleration motion of said device along at least one axis and generating an acceleration signal in response (col. 13, lines 13-40);

a display that includes moving a graphical image that is capable of being moved in said display (fig. 1a-c)

a processor (100 in fig. 8) communicating with said display (12 in fig. 8) and receiving said acceleration signal (output of 88, 86 in fig. 8);

a memory communicating with said processor and storing a predetermined threshold (col. 7, line 63 – col. 8, line 14) and storing a slew rate variable (col. 9, lines 4-7, 17-22; figs. 7a-e);

wherein said processor receives said acceleration signal and moves said graphical image in response to said acceleration signal (for example; figs. 3a-b; fig. 1a-c).

Feinstein does not expressly disclose an image capturing device, a user-adjustable predetermined threshold, nor moving a graphical selection indicator in response to the acceleration signal.

Thomas discloses a graphical selection indicator (cursor, 506 in fig. 5a-e) that moves in response to an acceleration signal (col. 3, lines 37-42, col. 6, line 66 - col. 7, line 59) and is capable of being moved in said display to select from among a plurality of displayed icons (col. 3, lines 42-44, col. 1, lines 14-18).

Thomas and Feinstein are analogous art because they are both from the same field of endeavor namely accelerometer based user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to control a cursor as taught by Thomas in the device of Feinstein, for the benefit of additional interaction between the user and the device via the accelerometers.

Neither Thomas nor Feinstein expressly disclose that the device is an image capturing device nor a user-adjustable predetermined threshold for the acceleration sensor.



House discloses, an image capturing device (fig. 1; for example), comprising an acceleration sensor (col. 9, lines 44-47) and camera features and utilities are activated in response to an acceleration signal (abstract; col. 9, lines 59-62) only if the acceleration signal exceeds a user-adjustable predetermined threshold (col. 9, lines 51-59).

Thomas, Feinstein and House are analogous art because they are all from the same field of endeavor namely accelerometer based user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the devices of Feinstein and Thomas in an image capturing device with a user-adjustable predetermined threshold as taught by House.

The motivation for doing so would have been to avoid false alarms and activations (House; col. 9, lines 51-54).

**With respect to claim 11**, Feinstein, Thomas and House disclose, the device of claim 9 (see above).

Feinstein further discloses, said memory further storing an enable variable, wherein said processor moves said graphical selection indicator in response to said acceleration signal only if said enable variable is set to an enable state (col. 6, lines 40-58).

**With respect to claim 12**, Feinstein, Thomas and House disclose, the device of claim 9 (see above).

Feinstein further discloses, a select switch (62, 64 in fig. 4), wherein said processor moves said graphical selection indicator in response to said acceleration signal only if said select switch is set to an enable state (col. 6, lines 40-58).

6. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrock et al. (US 5,923,908) in view of Thomas (US 6,567,101) and further in view of House et al. (US 5,878,283).

**With respect to claim 13**, Schrock discloses, a navigation method for an image capturing device (fig. 2), comprising the steps of:

displaying (on touch screen display 22) a plurality of mode variables (fig. 5-7; col. 2, lines 53-61);

moving a graphical selection indicator (finger or stylus input device 24) among a plurality of mode variables (col. 1, lines 9-24; col. 2, lines 53-64; col. 4, lines 6-12; col. 5, lines 1-50).

Schrock does not disclose an acceleration signal in response to detecting the acceleration of the device and moving a graphical selection indicator in response to the acceleration signal.

Thomas discloses manipulation of a graphical selection indicator (cursor 506) in response to a detected acceleration signal (col. 4, lines 39-46).

Thomas and Schrock are analogous art because they are from the same field of endeavor namely user interface designs and systems.

At the time of the invention it would have been obvious to one of ordinary skill in the art to substitute the acceleration signal manipulation taught by Thomas in the device of Schrock for the benefit of increasing the volume and surface area of a device.

Schrock and Thomas do not expressly disclose storing a user-adjustable predetermined threshold.

House discloses, an image capturing device (fig. 1; for example), storing (the threshold must inherently be stored for the device to compare the movement to a threshold) a user-adjustable predetermined threshold (col. 9, lines 51-59), wherein camera features and utilities are activated in response to an acceleration signal (abstract; col. 9, lines 59-62) only if the acceleration signal exceeds a user-adjustable predetermined threshold (col. 9, lines 51-59).

Thomas, Schrock and House are analogous art because they are all from the same field of endeavor namely user interface designs and systems.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the devices of Schrock and Thomas in an image capturing device with a user-adjustable predetermined threshold as taught by House.

The motivation for doing so would have been to avoid false alarms and activations (House; col. 9, lines 51-54).

**With respect to claims 14-15**, Thomas, Schrock and House disclose, the method of claim 13 (see above).

Schrock, when combined with Thomas and House, further discloses, wherein the detecting step comprises detecting an acceleration magnitude and direction (col. 4, lines 39-43).

**With respect to claims 16-18**, Thomas, Schrock and House disclose, the method of claim 13 (see above).

Schrock, when combined with Thomas and House, further discloses, wherein the detecting step comprises detecting vertical and horizontal pivoting motion and horizontal rolling motion (Schrock; figs. 5a-e; col. 4, lines 39-61).

**With respect to claim 19**, Thomas, Schrock and House disclose, the method of claim 13 (see above).

Schrock, when combined with Thomas and House, further discloses, the detecting step further comprises detecting accelerations along three substantially orthogonal axes (Schrock; X, Y and Z axis; col. 4, lines 39-61).

**With respect to claim 20**, Thomas, Schrock and House disclose, the method of claim 13 (see above).

Schrock, when combined with Thomas and House, further discloses storing a predetermined threshold (House; col. 9, lines 51-59; the threshold must inherently be stored for the device to compare the movement to a threshold); comparing said acceleration signal to said predetermined threshold (House; col. 9, lines 54-62); and moving said graphical selection indicator (Thomas; 506 in figs. 5a-e) in response to said acceleration signal (House; abstract; col. 9, lines 59-62) only if said acceleration signal exceeds said predetermined threshold (House; col. 9, lines 51-59).

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/  
Supervisory Patent Examiner, Art Unit 2629

/W. L. B./  
Examiner, Art Unit 2629  
1/13/09